

**SITUATION REPORT
INCIDENT COMMAND POST GOLD KING
GOLD KING MINE RELEASE INCIDENT
U.S. ENVIRONMENTAL PROTECTION AGENCY**



Security fence installation activities around Gladstone Ponds (04 November 2015).

Subject: EXECSUM / SITREP #49
Gold King Mine Release Incident
San Juan County, Colorado
Latitude: 37.8945 Longitude: -107.6384

From: Situation Unit, Incident Command Post Gold King

Date: 10 November 2015

Reporting Period: 0700 03 November 2015 through 0700 10 November 2015

Website: www.epa.gov/goldkingmine



For Internal Use Only

EXECUTIVE SUMMARY

Situation Summary

EPA Region 8 is managing the Gold King Mine Release. Ongoing field activities include water treatment and winterization activities at the Gold King Mine/Gladstone site.

Objectives

- Ensure health and safety of the public and responders.
- Continue private water deliveries to homes with Primary MCL Exceedances.
- Continue coordination with federal, state, tribal and local stakeholders.
- Mine Operations- A partial list of additional planned activities at the GKM site include:
 - GKM Portal
 - Additional Grading Activities
 - Security Gate Installation
 - Upper Gladstone Area
 - Additional drainage and reclamation activities
 - Installation of additional fencing and signage at Gladstone Ponds (ongoing).
 - Installation of additional fencing and signage at Gladstone Ponds (ongoing).
 - Installation of run on controls along east side of Gladstone ponds (ongoing).

Command Emphasis

For this operational period, the command emphasis is:

- Safety of responders and the public
- Visitors to the mine site are required to go through a safety briefing. See Mine Site Safety Plan.

The metrics provided in this Situation Report represent quantities reported for work completed from 0700 03 November 2015 through 0700 10 November 2015. Highlighted text and metrics represent changes from previous SITREP. Press releases are presented in Attachment 1.



1.0 BACKGROUND

The Gold King Mine (GKM) near Silverton, Colorado is an historic gold mine at an elevation of approximately 11,300 feet above mean sea level. The mine discharge includes acidic mine drainage that is a contributor of heavy metals into the Cement Creek drainage of the Animas River watershed. The GKM workings have been inaccessible since 1995 when the mine portal collapsed.

On 5 August 2015, up to three million gallons (estimated) of water containing sediment and dissolved metals was suddenly released from the Gold King Mine adit. This water discharged into Cement Creek that feeds into the Animas River, and eventually flows into the San Juan River.

US EPA Region 8 continues to assess and mitigate effects from the release.

2.0 OPERATIONS

2.1 Mine Operations

2.1.1 Current Mine Operations Summary

- A pipeline is conveying water from Gold King Mine to the Gladstone ponds en route to the water treatment system.
- Water treatment system is operational (including the tiered solid dewatering pad) and is treating between 550 to 600 gallons per minute (gpm).
- Water flowing from the Gold King Mine is being treated with lime to adjust the pH. The lime is being added mechanically at the water clarification system.
- Winterization (building construction) of the treatment system is complete.
- North Fork creek restoration is complete.
- Continued demobilization of equipment as it becomes no longer needed for mine operations.
- Water quality monitoring of treatment system will continue through the winter.



Removal of Red and Bonita Ponds is complete.

2.1.2 Mine Operations- Planned Activities

A partial list of additional planned activities at the GKM site include:

- GKM Portal Stabilization
 - Installation steel sets (first 60 feet inside mine).
 - Security Gate Installation
 - Foam concrete installation above steel sets
 - Installation of Flow Control Structure
- Upper Gladstone Area
 - Additional drainage and reclamation activities
 - Installation of additional fencing and signage at Gladstone Ponds
 - Installation of run on controls along east side of Gladstone ponds.



2.2 River Sampling

U.S. EPA will conduct future sampling activities according to the Long-Term Monitoring Plan. The table below summarizes operational activities for surface water and sediment sampling. Sample quantities are based on the SCRIBE database, and include field samples and quality assurance/quality control (QA/QC) samples.

Table 1 - Operations Sampling Summary									
Matrix	U.S. EPA Region	Quantity							
		November 2015							Cumulative
		3	4	5	6	7	8	9	
Surface Water Samples	8	4	0	0	0	0	0	0	739
	6	0	0	0	0	0	0	0	561
	9	0	0	0	0	0	0	0	310
	Total	4	0	0	0	0	0	0	1,610
Sediment Samples	8	0	0	0	0	0	0	0	349
	6	0	0	0	0	0	0	0	553
	9	0	0	0	0	0	0	0	256
	Total	0	0	0	0	0	0	0	1,158

2.3 Private Well Sampling

U.S. EPA has collected and analyzed samples from drinking water wells located near the Animas River and San Juan River. There has been no sampling of private drinking water wells in U.S. EPA Region 9.

Private well samples that have metals concentrations greater than the Maximum Contaminant Levels (MCLs) and were collected from private drinking water wells during the first sampling event were sampled a second time to confirm the analytical results. In Region 8, the second round of samples at a given property were collected from the tap. U.S. EPA as notified residents that have MCL exceedances.

The table below provides a summary of private drinking water well sampling completed during this operational period.

Table 2 – Private Drinking Water Well Sampling Summary									
Matrix	U.S. EPA Region	Quantity							
		November 2015							Cumulative
		3	4	5	6	7	8	9	
Private Drinking Water Well Samples Collected (from SCRIBE, includes QA/QC samples)	8	0	0	0	0	0	0	0	449
	6	0	0	0	0	0	0	0	309

Notes: Some residents received multiple results letters

Some residential sampling included surface water and/or sediment sampling.

Table 3 - Summary of Wells with MCL Exceedances		
Matrix	U.S. EPA Region	Cumulative
Wells containing contaminant concentrations above MCLs during second sampling event	8	4
	6	1*

*Note: One well in Region 6 exceeded the MCL for lead and after further assessment by the State of New Mexico and the U.S. EPA, it was determined that the exceedance was not related to the GKM incident.



2.4 Mitigation Activities

No public water systems are currently affected by the release or response operations. U.S. EPA continues to coordinate and deliver bottled drinking water to **four** residences in Region 8. The table below summarizes other public support activities completed.

Table 4 - Completed Public Support (Cumulative)				
Activity	U.S. EPA Region	Qty. (gal)	Qty. (hay bales)	Qty. (salt blocks)
Potable Water Deliveries	8	105,600		
Livestock / Agricultural Water Deliveries	8	133,770		
	6	1,104,990		
	9	218,400		
	BIA	975,888		
Agricultural Food Deliveries	6		244	
	9		8,448	
Agricultural Salt Block Deliveries	8			500

2.4.1 Water Tanks

On or about 15 August 2015, 15 black steel tanks (16,500 gallon capacity each) were delivered by the ERRS contractor to certain locations on the Navajo Reservation as part of the response to the Gold King Mine release incident. U.S. EPA has removed all 15 of the water tanks from the Navajo Reservation.

2.4.2 Other Mitigation Activities

No other activities reported.

3.0 PLANNING

3.1 Environmental Unit

As of 02 November 2015, EPA Region 8 completed mailing letters containing analytical results for private properties where U.S. EPA collected sediment and/or drinking water samples.

3.2 Resources

The table below summarizes staffing numbers for the federal entities and agencies active at the Gold King Mine Site.

Table 5 - Personnel On-Site (as of 06 November 2015)		
Location	Agency / Entity	Number of Personnel
Mine Operations	U.S. EPA	2
	USCG	2
	U.S. EPA Contractors (Other-Daily average)	21
	Visitors	0
Total		25

USCG = U.S. Coast Guard.



4.0 FINANCE

4.1 Estimated Response Costs to Date

The table below summarizes estimated costs for the response as of 3 November 2015.

Table 6 - Estimated Response Costs Reported as of 10 November 2015					
U.S. EPA Region	U.S. EPA Cumulative Expended Payroll	U.S. EPA Cumulative Expended Travel	U.S. EPA Cumulative Other Charges	U.S. EPA Cumulative Contractors Cost	Total Cumulative Costs
8	\$1,272,198	\$298,256	\$46,109	\$8,064,115	\$9,680,678
6	\$649,858	\$120,582	\$12,989	\$2,742,514	\$3,525,944
9	\$306,018	\$72,674	\$0	\$2,649,871	\$3,028,563
Total	\$2,228,074	\$491,512	\$59,098	\$13,456,500	\$16,235,185

4.2 Estimated Burn Rates

The table below summarizes current estimated burn rates for the response.

Table 7 - Estimated Daily Burn Rates as of 10 November 2015	
U.S. EPA Region	Estimated Average Daily Burn Rate
8	\$20,000
6	\$-
9	\$8,920
Total	\$28,920

5.0 LOGISTICS

Logistics completed demobilization of the ICPGK facility in Durango, Colorado on Friday, 23 October 2015.

6.0 SAFETY

Safety did not report any recordable injuries or illnesses during this operational period.

7.0 PUBLIC INFORMATION

7.1 Community Engagements and Public Events

Community engagements and public events that occurred during this period included:

- None Reported

7.2 VIPs/Congressional Visits

7.2.1 Occurred Events

VIP / Congressional visits that occurred during this period include:

- None.

7.2.2 Anticipated Events

The table below summarizes known site visits and public events scheduled for the next 14 days.



Table 8 - Anticipated Site Visits and Public Events Summary	
Planned Event	Anticipated Date
Animas River Stakeholders Meeting	17 November 2015

7.3 Call Center / Notification Plan

U.S. EPA Headquarters continues to operate a national call center (844-607-9700).

Personnel at the EPA Region 8 call-in number are now managing the Gold King Mine Stakeholder Alert and Notification Plan.

8.0 LIAISON

The list below summarizes Federal, regional, local and other entities participating in the response.

U.S. EPA
U.S. Coast Guard (USCG)
U.S. Geological Survey (USGS)
U.S. Army Corps of Engineers (USACE)
U.S. Bureau of Reclamation (USBOR)
U.S. Fish and Wildlife Services (USFWS)
Colorado Office of Emergency Management (OEM)
Colorado Department of Public Health and Environment (CDPHE)
New Mexico Environment Department (NMED)
New Mexico (NM) Department of Health
NM Office of the State Engineer
NM Department of Game and Fish
State of Utah
State of Arizona
City of Durango
La Plata County
San Juan County
San Juan Basin Health Department
County of San Juan – New Mexico
Southern Ute Indian Tribe (SUIT)
Navajo Nation

9.0 SOURCE OF ADDITIONAL INFORMATION

For additional information, refer to www.epa.gov/goldkingmine.



ATTACHMENT 1
PRESS RELEASES



Exec. Sum/SITREP #49 (10 November 2015)
Gold King Mine Release Incident
ICP Gold King

NO PRESS RELEASES FOR THIS OPERATIONAL PERIOD
